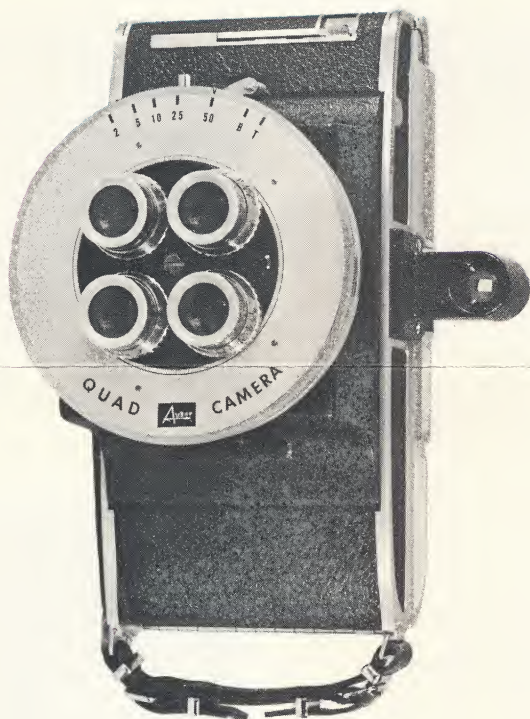
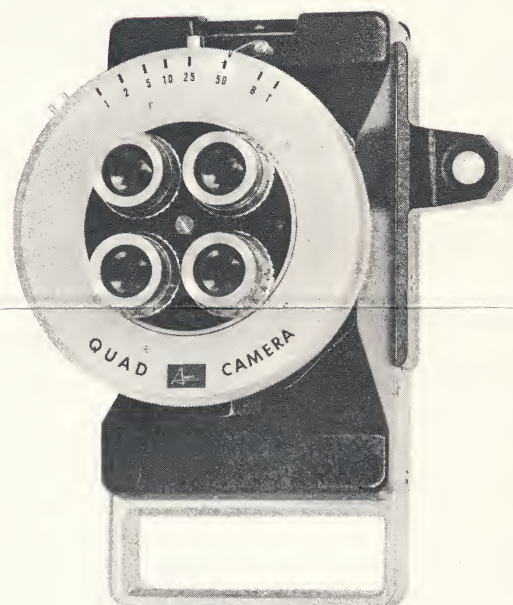




QUAD[®] CAMERA TECHNICAL DATA SHEET



ID 32-40



ID 32-100

DESCRIPTION

The Avant QUAD Camera uses standard Polaroid Land black and white, transparency, and "Polacolor"[®] films and may be used in a fixed location or may be hand-held, with or without auxiliary lighting. The permanent, ready-to-use multiple photograph is available in 10 or 50 seconds for black and white and color photos respectively. The camera is factory prefocussed for a fixed lens-to-subject distance. Depth of field allows variation in subject distance to permit head-size compensation. A precise bright-frame viewfinder is adjusted for parallax, instantly presenting the operator the exact scene to be photographed. A matched set of four lenses with geared apertures interchangeably provides any number of identical photographs from 1, to 2 vertical or 2 horizontal, to 4 sharp, knife-edged, undistorted images. The shutter is self-cocking and provides a wide range of exposure times. A large selection of accessories are available and described on a separate leaflet.

UNIQUE FEATURES

FLEXIBILITY

1 to 4 interchangeable, identical, upright, simultaneous, sharp, parallax-corrected photos.

INSTANT FULL-SIZE PHOTOS

Knife-edge separation without even dark lines between full $1\frac{7}{16}'' \times 1\frac{7}{8}''$ images; image reduction from 1:10 to 1:5 $\frac{1}{2}$.

INTERNAL OPTICS

No makeshift external mirrors and imprecise image alignment; sealed against dust and fingerprint smudges, minimum lighting requirements.

PRODUCTIVE

Precision viewfinder minimizes waste shots; no costly cropping of dead space; never skewed; no messy darkrooms; no expensive retakes.

PORTABLE

Eliminates expensive hours required for people to come to camera, distribution delays, even the necessity for tripods, if hand-held.

RUGGED

All casting construction eliminates vulnerability of bellows; suitable for field work.

RELIABLE

Foolproof, single, self-cocking shutter meters same amount of light to all four integrated optical systems.

COMPACT

A complete camera, duplicator, and darkroom in less than six pounds.

®Registered Trademarks of Polaroid Corp.



avant incorporated

box 88 • concord, massachusetts • 259-9260 (617)

Knife Edge Separation



ACTUAL SIZE
1:7½ Ratio

TYPICAL APPLICATIONS

IDENTIFICATION

Cards and badges

RECORDS

Personnel, prisoners, and publicity

PRINTING

"Omnichcks," technical manuals, directories, annuals, police bulletins

INDUSTRIAL

Small parts photos, damage reports

AUDIO-VISUAL

35 mm and 3¼- by 4¼-inch slides



Model A, 7½X at 36"
(Standard)



Model B, 10X at 48"
(Optional)

MODEL COMPARISON

ID 32-100 As, Bs, Cs (Synchronized)

5-7 seconds	Loading time
Yes — pack	Interchangeability of film loaded
Pull sheet (very convenient)	Convenience when removing pictures
Can be done with camera loaded	Accessibility for cleaning rollers
2-3 persons/min. (black and white & color)	Photography capacity
Flat — 0.008-0.009 in. thick	Film flatness
1:2.3	Approximate cost ratio black and white: color
Same	Cost of black and white
No	Transparent film for 35 mm slides
No	Halftone screen (H-1) for offset printing
Series 100 black and white or color	Recommended film usage
F-1 or F-2 floodlights	Recommended lighting black and white, transparent
F-3 strobe	Recommended lighting color
6" x 6½" x 9" (5 lbs)	Physical characteristics
\$600	Price: Model C
\$550	Models A, B

ID 32-40 A, B, C (Non-synchronized)*

10-15 seconds
No — roll
Tear out print and rip negative (less convenient)
Must empty camera of film
2 persons/min (black and white) 1 person/min (color) *
Curled — 0.007-0.008 in. thick (must be straightened)
1:3.0*
Same
Yes
Yes
Series 40 black and white or transparent
F-1 or F-2 floodlights
—*
6" x 6½" x 10" (6 lbs)
\$545
\$495



Model C, 5½X at 28"
(Special Order)



4 identical



2 vertical

Multi-Photo Flexibility



2 horizontal



4 individual

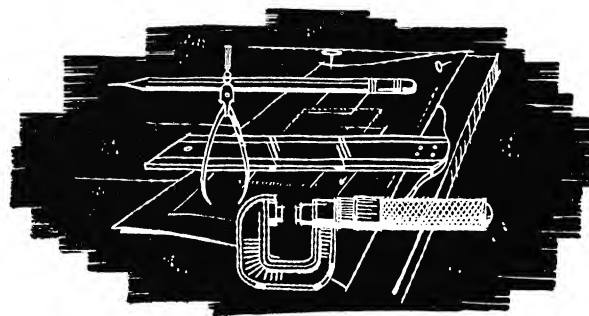
* Note: ID 32-40 series cameras not available synchronized unless custom ordered because of Photography Capacity and Cost factors of Type 48 Polacolor® film.

Foreign prices higher.

Prices subject to change without notice.

NEW PRODUCTS

Please refer to **TELEPHONY** when writing to the manufacturer about the new products listed below.



CABLE TAPES—An improvement in the reliability of multi-pair telephone cable has resulted from the joint development of a corrugated plastic tape by Superior Cable Corp. and the Du Pont Co.

The product is made from Du Pont Mylar polyester film by means of heat and pressure. It is wrapped between the inner core and outer coverings of telephone cables to protect the insulated conductors from heat, lightning damage, and mechanical abrasion.

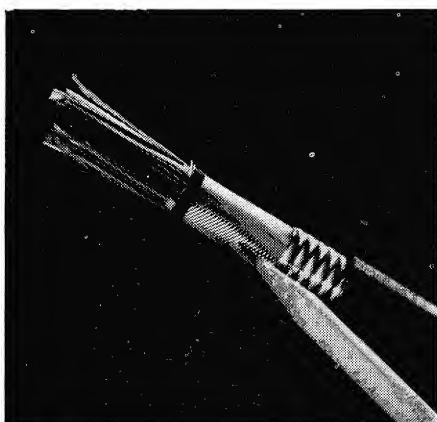
Du Pont has acquired rights to Su-

maintaining secure protection for the cable core.

When applied to a cable core, the corrugated tape interlocks as it overlaps itself, minimizing core wrap movement and gapping (shingling) at the overlap when the cable is bent.

Tests of spirally wrapped constructions show that the interlocking of the corrugated grooves also increases the inherently high core-to-shield breakdown strength of Mylar film and gives greater protection against transient voltages caused by lightning strikes. The cut-through resistance of the Mylar is enhanced by the corrugations.

E. I. du Pont de Nemours & Co.,
Dept. T, 9454 Nemours Bldg., Wilmington, Del. 19898.



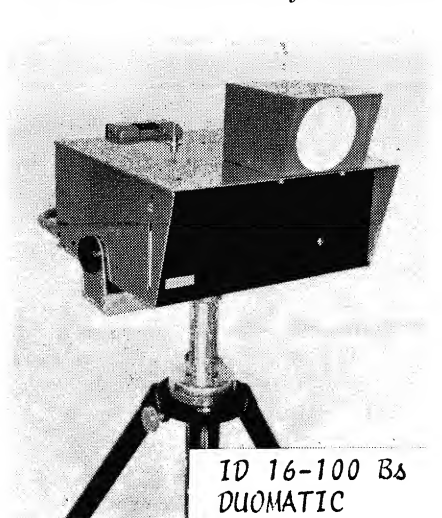
perior Cable's patent applications, with the right to sublicense other users, and will manufacture corrugated Mylar at an existing Du Pont plant in Florence, S.C. Plans call for 2-mil and 3-mil Type A Mylar to be corrugated to over-all thicknesses of 8 to 10 mils.

The corrugated profile traps air much like crepe paper, providing thermal protection for polyethylene-insulated conductors in the cable core during the hot-melt extrusion of the cable's outer jacket. The company says studies show that corrugated Mylar polyester film is a far more effective thermal barrier than conventional plastic and rubber tapes, and reduces a major cause of rejects during cable manufacture.

The high dielectric strength of Mylar provides greater service reliability and lower maintenance costs for users, the company states. Dimensional corrugations also improve the cable's flexing and bending characteristics, while

PHOTO ID CARDS—A new method of preparing photographic records and identification (ID) cards or badges for telephone employees has been announced by Avant, Inc.

The company states that with its Duomatic camera, with the Polaroid Land Pack Film Back, more than 120 individuals per hour can be photographed and issued ID cards at any location de-



sired at less than 12 cents per card.

A three-step operation, performed by anyone, features this method:

- A standard IBM card containing up to 10 lines of information is placed into the Duomatic Camera.

- The operator takes individual's photo.

- The Polaroid print containing one, or two identical ID cards including the photo is removed, trimmed and issued. Second card may be filed for control or later issuance.

The company lists the following advantages of the Duomatic system:

- (1) Simultaneous posing, thereby cutting time before the camera as much as 75 per cent.

- (2) Eliminating darkrooms.

- (3) Eliminating retakes of bad "shots."

- (4) Eliminating the need to tie up an expensive professional photographer and instead use clerical help to get consistently top-quality photos by using precision viewfinder for control.

- (5) Using QUAD cards for immediate random access to photos through data processing system and eliminating clerical searching.

- (6) Ten-second distribution of one to four identical, simultaneous photos, eliminating costly "temporary" records.

- (7) Dialing in just the number of identical copies you want and not being forced to make a surplus for visitors, etc.

- (8) Electrical and automatic data boards to eliminate slow, manual drug-gery.

- (9) Making color-coded ID cards or badges in interchangeable quantities of one or two in less than a minute. These photo ID cards or badges are complete with 10 to 18 lines of data and signatures, without time-consuming paste-ups. The end product is a more tamper-resistant card, and also an IBM record card for automatic cross filing.

Avant, Inc., Dept. T, Box 88, Concord, Mass.

RODDING MACHINE—The O'Brien Manufacturing Corp. model "1000" power rodder, with continuous rod, features a set of cutters and accessories



Among the users of *vant* equipment:

- N. Y. World's Fair
- Foreign governments
- Terrell (Tex.) State Hosp.
- Butterworth Hospital
- Industrial National Bank of Providence
- First National Bank of Atlanta
- Armstrong Cork Co.
- General Electric
- Hershey Chocolate Co.
- U.S. Steel
- Western Electric
- Boeing
- Bendix
- United Aircraft
- Hilton Hotels
- Manpower, Inc.
- Iberia Airlines
- Boston Police Dept.
- Pinkerton Detective Agcy.
- Univ. of Miss.
- Texas A&M
- Brandeis Univ.
- Dartmouth Univ.
- Iowa State Univ.
- M.I.T.
- Pan-American Univ. of Puerto Rico
- Seattle Univ.
- Univ. of British Columbia
- Univ. of Hawaii
- Univ. of Minnesota
- Bache and Company
- Merrill Lynch, Pierce, Fenner & Smith
- United States Government:
Secret Service
N.A.S.A.
F.A.A.
Air Force
Army
Navy
Peace Corps
A.E.C.
Nat'l. Bur. Standards

**The QUAD and DUOMATIC cameras
are products of:**



vant incorporated

**Box 88 Concord, Massachusetts
Tel: (617) 259-9260**



AUTOMATE YOUR IDENTIFICATION



For graphic records, meet the

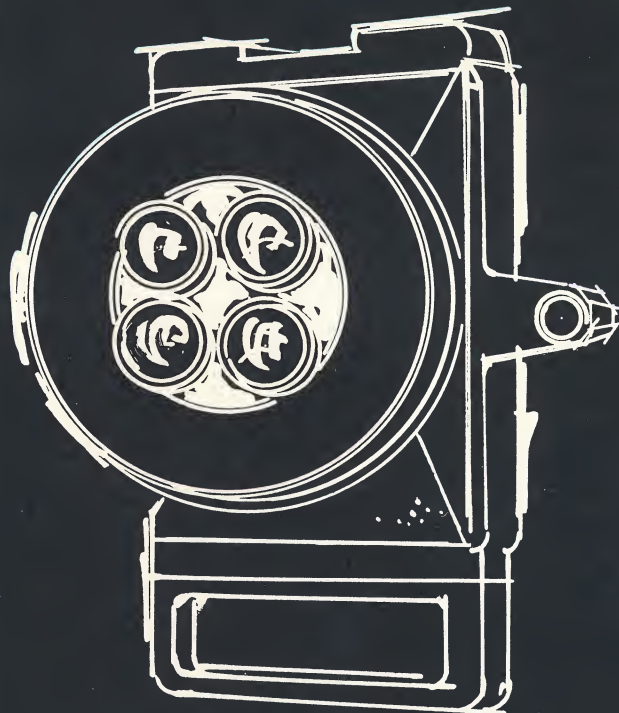
QUAD[®]

Four times the results for half the effort

Among uses of QUAD Photos:

on scholarship and job applications • in employee, student, faculty dossiers • identify hospital staff, patients, infants • for mug shots, license, permit photos • on I.D. cards, badges, activity passes • parking permits • taxi and pistol permits • for publicity photos, accident reports, damage reports • for 35 mm slides, super or 3¼ x 4¼ slides • for yearbooks, tech manuals, graphic directories.

IN ONE HOUR, THE QUAD CAN READILY
PRODUCE 480 PHOTOS OF 120 PEOPLE

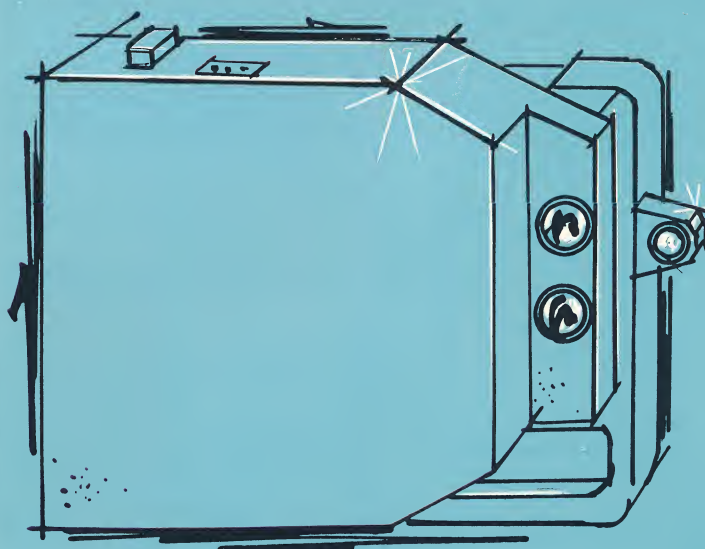


For graphic cards and badges,
here's
the **DUOMATIC**[®] *

1-2-3 steps to a complete photo I.D. card

1. Insert card (standard sized I.B.M.) into camera. Card can have pre-printed information or not.
2. Click the shutter.
3. In 30 seconds, one or two identical cards are produced (photo of subject and all . . . ready for use). Black and white or color.

YOU VERIFY THE RESULTS ON THE SPOT —
GET ADDITIONAL COPIES IMMEDIATELY



*Available as a complete camera or as an attachment to the QUAD.

® Trademarks of Avant, Inc.

THE QUAD thrives on work. It produces four identical photos of one person in just 10 seconds (or one photo of four people, or two and two, or any combination).

Black and white pictures develop ready for use in 10 seconds. Colored photos develop in 50 seconds.

The camera weighs under six pounds, so it travels easily. Carry it to your subjects, or use it in a fixed location.

Reproduction is sharp and clear, even in natural light.

The cost per photo — less than six cents.

The savings in time, manpower and expense per photo ranges from \$1.00 to \$5.00 less than any other process you can use.

File copies may be data processed for random access using 60 column QUAD cards.

Little wonder the QUAD is revolutionizing record keeping, permitting identification photos to supplant thousands of words.

QUAD card



Model A,
7½X at 36"
(Standard)

Model B,
10X at 48"
(Optional)



Model C,
5½X at 28"
(Special
Order)

A Duomatic camera can produce over 120 I.D. cards per hour, at a cost of less than 12 cents per card. The I.D. card has space for 10 lines of data, double-spaced.

Immediate reproduction and verification cuts clerical time, lets re-takes and corrections be done on the spot. Mailing costs are eliminated. The card is ready for use 30 seconds after the shutter clicks.

Duomatic graphic identification cards can be used as tickets (and be punched). You can color-code both the subject backgrounds and the cards to indicate various privileges, such as parking and dining, etc., the year of issuance, affiliations and so on.

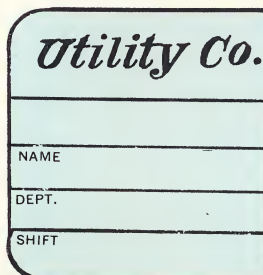
Cards can incorporate school or company colors. Special logos, crests, and trademarks reproduce easily.

Using 40 column DUOMATIC file cards, the file copy can be data processed for random access correlating with an existing alpha-numeric system.

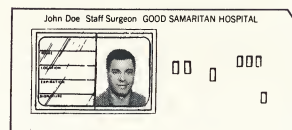
For 1 or 2 complete ID badges . . . again color-coded if desired . . . simply turn the DUOMATIC attachment 90° on its side.

When you want sure-fire identity . . . conveniently and at the lowest possible cost . . . then you want the DUOMATIC!

ID badge



DUOMATIC file card



Graphic student
activity card



Industrial I.D. card